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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,381	08/17/2001	Serge Lasserre	TI-31354	4434

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EXAMINER

BRAGDON, REGINALD GLENWOOD

ART UNIT PAPER NUMBER

2188

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/932,381

Applicant(s)

LASSERRE, SERGE

Examiner

Reginald G. Bragdon

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004 and 15 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-12 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 11 and 14-20 is/are allowed.
- 6) ☒ Claim(s) 12, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The Information Disclosure Statement(s) received 16 July 2004 has been considered.

Please see the attached PTO-1449(s).

### ***Specification***

2. Applicant is requested to update any data (continuation serial number, patent number, etc...) concerning co-pending or related applications listed in the specification.

The status of the applications on pages 1 and 11 should be updated as appropriate.

### ***Claim Objections***

3. Claims 7-10 are objected to because of the following informalities:

As per claim 7, line 11, "valid" should be --dirty--.

All dependent claims are objected to as having the same deficiencies as the claims they depend from.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 21-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 21, Applicant indicates that the specification teaches the limitations of this claim at paragraph 67 (see page 11 of the response filed 20 July 2004). However, it is not clear how the specification as filed (in paragraph 67 on page 25), or the pre-grant publication 2002/0078268 (in paragraph 67, page 5) support the limitations as set forth in the claim.

With respect to claim 22, Applicant indicates that the specification teaches the limitations of this claim at paragraph 66 (see page 11 of the response filed 20 July 2004). However, it is not clear how the specification as filed (in paragraph 66 on page 25), or the pre-grant publication 2002/0078268 (in paragraph 66, page 5) support the limitations as set forth in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by John M. Goodman (“Memory Management for All of Us”).

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As per claim 12, Goodman teaches the use of present bits (“indicator bits”) in a page or segment descriptor which is used to indicate whether or not the data for the page or segment is actually in physical RAM (“local memory that occupies a portion of an address space of the processor”). See page 433, lines 3-7. When pages or segments are loaded into memory, the page/segment is transferred to a selected location in physical memory (page 433, lines 32-35) from disk and the present bit is set (page 433, line 36) (“transferring a block of data values from a second memory to selectable segments of the local memory” and “responsive to the transferring of a data value to one of the plurality of segments in the local memory, setting the indicator bit associated with the segment in the local memory to a valid state”). Goodman teaches a process where if a CPU that is about to execute an instruction requiring a page of memory (“operating the processor to access a selected segment in the local memory within the address space”), and the present bit is not set (“responsive to the state of the indicator bit...not in its valid state”), then the data is copied from disk to the physical RAM. See page 434, lines 1-6. Goodman also teaches a direct memory access controller chip associated with a CPU that is used to speed the transfer of information to and from hard disk drives (“...using a direct memory access controller in the digital system” and “operating the direct memory access controller to transfer a data value to the selected segment in the local memory”). See page 119, lines 17-20.

***Allowable Subject Matter***

8. Claims 3-6, 11, and 14-20 are allowed.
9. Claims 7-10 are allowable over the prior art of record, but are objected to as set forth above.

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***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kish et al. (4,868,738) teaches loading page using DMA on a page fault.

Schimmel (6,496,909) teaches generating a page fault when a valid bit associated with a physical page frame is not valid.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any response to this final action should be mailed to:

Box AF  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

All "OFFICIAL" patent application related correspondence transmitted by FAX must be directed to the central FAX number at **(703) 872-9306**:

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"INFORMAL" or "DRAFT" FAX communications may be sent to the Examiner at (703) 746-5693, only after approval by the Examiner.

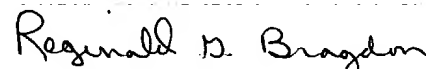
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald G. Bragdon whose telephone number is (703) 305-3823 (after October 14, 2004, the telephone number will be 571-272-4204). The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and every other Friday from 7:00 AM to 3:30 PM.

The examiner's supervisor, Mano Padmanabhan, can be reached at (703) 306-2903 (after October 14, 2004, the telephone number will be 571-272-4210).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RGB  
October 5, 2004

  
Reginald G. Bragdon  
Primary Patent Examiner  
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